

BEFORE THE
Federal Communications Commission
WASHINGTON, D. C.

ORIGINAL
FILE
RECEIVED

NOV - 9 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In The Matter Of:

Amendment of the Commission's
Rules to Establish New Personal
Communications Services

) GEN. Docket No. 90-314
) ET Docket No. 92-100
)
) RM-7140, RM-7175, RM-7617
) RM-7618, RM-7760, RM-7782
) RM-7860, RM-7977, RM-7978
) RM-7979, RM-7980

To: The Commission

COMMENTS OF PERTEL, INC.

Gardner F. Gillespie
HOGAN & HARTSON
555 13th Street N.W.
Washington, D. C. 20004

Attorneys for PerTel, Inc.

November 9, 1992

0+5

SUMMARY

PerTel, Inc. believes that the Commission has an opportunity in this proceeding to create a viable and innovative new family of mobile communications services and to establish meaningful competition to cellular operators. But to reach these goals, the Commission must award sufficient spectrum to PCS, allow service areas large enough to permit seamless coverage and economies of scale, and ensure that the licensees selected are the most capable of delivering the promise of PCS.

Specifically, PerTel supports the following:

- License initially two PCS operators for each of 49 regional trading zones.
- Permit PCS licensees to use 40 MHz from a 60 MHz block of frequencies for a transitional period to permit viability and sharing. After the end of the transitional period, require each licensee to make final selection of a 40 MHz spectrum block. Then use the reclaimed spectrum for a third PCS licensee or other purpose.
- Permit any entity to apply, except an entity that owns a cognizable interest in a mobile communications provider licensed to serve more than 20 percent of the PCS license area.
- Select the best applicants for the 20 largest PCS markets by a streamlined, paper comparative proceeding with no oral testimony, limited filing opportunities, and use of outside experts.
- Use lotteries for licensing the lesser 29 markets. Require lottery applicants to pay substantial filing fees and demonstrate financial and technical qualifications.

Thoughtful actions by the Commission at this stage can lead to the speedy development of exciting new personal communications services.

BEFORE THE
Federal Communications Commission
WASHINGTON, D. C.

NOV - 9 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In The Matter Of:

Amendment of the Commission's)	GEN. Docket No. 90-314
Rules to Establish New Personal)	ET Docket No. 92-100
Communications Services)	
)	RM-7140, RM-7175, RM-7617
)	RM-7618, RM-7760, RM-7782
)	RM-7860, RM-7977, RM-7978
)	RM-7979, RM-7980

To: The Commission

COMMENTS OF PERTEL, INC.

PerTel, Inc. submits these Comments in response to the Commission's Notice of Proposed Rulemaking. PerTel is a venture of Westinghouse Communications, Harron Communications, and the controlling principals of Douglas Cable Communications, formed for the purpose of developing and delivering personal communications services.

PerTel believes that the rules adopted by the Commission in the proceeding should be written with an eye toward permitting the expeditious development of a viable personal communications service, while leaving as many technological issues as possible to the marketplace for resolution. Spectrum should be assigned to PCS licensees in quantities sufficient to permit the growth of a healthy PCS industry, as well as to permit sharing with OFS incumbents. The licensing process, at least in the largest markets, should

be geared toward selection of the most qualified applicants -- those who demonstrate the ability and commitment to initiate prompt and competitive services. The licensing process should also create incentives for the continued development of innovative PCS technical and service solutions.

I. Spectrum Issues

A. The Commission should allocate 140 MHz for PCS.

PerTel supports the Commission's proposal to allocate spectrum in the vicinity of 2 GHz for PCS, but PerTel believes that a total of 140 MHz should be allocated for these new services. As noted below, 140 MHz of spectrum would allow 20 MHz to be allocated for nonlicensed service, and 120 MHz for licensed PCS operation. Specifically, the bands at 1850-1910 and 1930-1990 should be allocated for licensed PCS, and the band at 1910-1930 should be allocated for unlicensed PCS.

B. The Commission should permit each PCS licensee to use 40 MHz at every location.

PerTel accepts the necessity of sharing this spectrum with operational fixed microwave service users. Because some areas in all markets will contain microwave users on these frequencies for the foreseeable future, it is essential to allocate frequency blocks in a manner that will permit the coexistence of PCS and microwave usage. The majority of microwave users are licensed for 10 MHz blocks of spectrum. PerTel believes, therefore, that the Commission's proposal to

award 30 MHz of spectrum to each PCS operator, with 15 MHz used for base station transmissions and 15 MHz for handset transmissions, is unworkable. There will be overlap in many markets of two PCS operators and a single microwave user. If the microwave user suffers objectionable interference, how will it know which of the PCS operators is responsible? It would be very difficult in such a situation for either the microwave user, or the PCS operators for that matter, to identify the source of the interference.

Moreover, in a sharing environment, 30 MHz is simply not enough spectrum to permit a viable PCS operation. The spectrum analysis performed by American Personal Communications indicates that many PCS licensees will have significant portions of their spectrum occupied by microwave users. Depending on the PCS technology employed, the "exclusion zones" of those microwave users may be quite large. If only 30 MHz were allocated to a licensee, there could be "dead areas" where interference zones to protect microwave users would prevent any operation by the PCS licensee. And even if there were not dead areas there could well be major areas of the PCS licensee's service area where the capacity available from unused spectrum is vastly insufficient to meet demand.

Finally, allowing each licensee to use a 40 MHz block in each portion of its license area would give much greater flexibility in terms of technology. Allowing 20 MHz for both

forward and reverse transmission paths has a greater potential for use by different technologies. Frequency-agile (narrowband) CDMA systems as well as frequency-agile TDMA systems could vie for market acceptance. And 20 MHz paths may even be wide enough for wider-spreading CDMA systems, especially those with tunable notch filters.

As PerTel has argued earlier in this proceeding, the Commission should do its best here not to foreclose the optimum technical solution for sharing between PCS microwave users. See Letter from Harlan Rosenzweig to Robert M. Pepper dated November 20, 1991. The wider the bandwidth awarded to PCS, the more technical flexibility that will be available in crafting solutions to the sharing problem, and the more likely that the technical solution or solutions ultimately accepted by the market will be optimal.

- C. The Commission should allow each PCS licensee temporarily to choose 40 MHz bands from a 60 MHz block.

PerTel suggests that initially the FCC award two PCS licenses of 60 MHz in each market, of which the licensees must choose 40 MHz blocks on which to operate at each location. This would allow each licensee to design its system with an eye toward maximizing the amount of usable frequency in the market in view of microwave usage. Thus, for example, if one 10 MHz frequency block is used in an area, the licensee could initially avoid those frequencies. At the same time the

licensee could open negotiations with all microwave users in the service area to determine which users could and would be best able to accept movement to other frequencies or transmission technologies. The PCS licensee, with notification to the Commission, would be permitted to switch its 40 MHz frequency block within the 60 MHz block during the transitional period in order to best meld its needs with those of OFS licensees. Not only would this help the PCS operator by making the service more viable, and reducing the ability of a single microwave operator to hold up the PCS operator for an exorbitant, and unjustifiable, sum to be bought out or moved, the consumer would also benefit. The prospect of having "dead areas" in the PCS market would be reduced considerably. At no time would a PCS licensee be permitted to use more than 40 MHz of frequencies in any location.

PerTel believes that at the end of a reasonable transition period -- we suggest 8 years -- all PCS licensees should be required to make a final selection of the 40 MHz spectrum block throughout their license areas, at one end or the other of the 60 MHz block initially allocated. The 40 MHz thus freed up by the two PCS licensees would then be available for licensing by a third PCS operator or for such other use as the Commission deems expedient at that time.

II. Licensing Issues

- A. The Commission should initially license two PCS operators per market.

PerTel believes that two PCS operators -- to provide mobile communications competition to the two incumbent cellular telephone operators -- is the optimum number at this time. It is important that the competition to cellular, as well as among PCS operators, be healthy and vigorous. As cellular technology itself moves to smaller cells and other "personal" characteristics, the competitive difficulties for the new PCS providers will be daunting. The competitive disadvantage for a start-up PCS operator will be increased by the threatened national scope of cellular service inherent in the recently announced McCaw/AT&T venture. Until the competitive market for PCS develops fully, PCS operators must be given a realistic opportunity to succeed. Under the licensing system we propose, when demand for PCS increases, and some of the incumbent microwave users have been cleared from the band, a third PCS competitor may be licensed. By that time the technology probably will have further advanced. Like a military commander harboring his reserves, the FCC can help ensure that the initial operators are able to compete with incumbent cellular operators, while preserving the prospect of additional PCS competition -- perhaps with technological advances -- in the future.

B. The Commission should award PCS licenses for 49 regional trading zones.

We support the Commission's proposal to license 49 trading zones. Licensing fairly large service areas will minimize the problem of coordinating sharing between microwave users and PCS operators. For example, it is essential that all parties be able to immediately identify who is responsible for any interference to microwave users. If two different PCS operators are operating on the same frequency in adjacent cells, and a nearby microwave user operating on some of those frequencies incurs interference, it may be difficult to determine which of the PCS operators is responsible. This potential problem will always exist to some extent, but larger serving areas will tend to minimize it.

Moreover, larger PCS service areas are necessary for other coordination purposes, to increase the ease of seamless service to persons within service areas, and to permit the earliest build-out throughout both metropolitan and more rural areas. In view of the consolidation of cellular systems, large PCS operations will also be necessary to achieve the necessary economies of scale to compete with cellular service.

Finally, regional licenses combined with reasonable eligibility for smaller cellular operators to obtain licenses will permit many such cellular companies to improve their competitive position vis-a-vis the large regional (and

national) cellular companies. Regional service areas would reduce the influence of smaller cellular operators in the region as a whole, and would permit them to be eligible for PCS licenses without significant anticompetitive effects.

We see no advantage to use of LATAs or other smaller licensing areas. Although smaller licensing areas would result in more PCS licenses, we do not see this as a benefit. Smaller operators will probably increase the amount of speculation in licenses, and diminish the likelihood that licensees will have the financial and technical ability and commitment to speed the commencement of PCS service. Moreover, the cellular experience indicates that the smaller cellular operators typically sell out to larger operators in any case. Finally, we believe that national licenses would present a huge potential for competitive abuse.

- C. Cellular operators who do not own a cognizable interest in mobile communications in more than 20 percent of the service area should be eligible.

PerTel supports American Personal Communications' proposal to allow cellular operators whose license areas cover no more than 20 percent of the population in the PCS license area to be eligible for a PCS license. Letter from Wayne N. Schelle to Chairman Sikes, September 17, 1992. It is apparent that major cellular providers, operating throughout a PCS license area, should not be eligible for competing spectrum. The cellular industry has made clear that it intends to use its

cellular spectrum to provide service directly competitive to PCS operators. To allow major cellular operators to obtain PCS spectrum flies in the face of the competitive thrust of this proceeding. For similar reasons we do not believe that entitles should be eligible for PCS licenses if they have interests in SMR licenses that cover more than 20 percent of the population of the proposed PCS service area.

On the other hand, we see little harm in allowing smaller cellular operators to be eligible for PCS licenses. These cellular operators may be able to use their cellular experience to provide PCS service rapidly and efficiently. We are not wedded to any particular percentage of ownership as preclusive, but we do believe that 20 percent is about the correct percentage.

We are not convinced, however, that the use of a multiplier in the manner suggested by APC is the right approach. APC would permit an entity that owns less than 20 percent of cellular operations in the PCS license area to be eligible for a PCS license. This could permit, for example, AT&T to obtain a 20 percent interest in McCaw, and still be eligible for PCS licenses. We believe, however, that any cognizable interest in a mobile communications operator licensed to serve more than 20 percent of the PCS service area should foreclose the owner from also holding a cognizable interest in a PCS licensee. A cognizable interest for these

purposes would remain one percent (5 percent for corporations). See Notice at 28, n.46. PerTel does not oppose LEC interests in PCS licenses, except to the extent that they have cognizable interests in mobile communications in the market.

PerTel is opposed to set-asides for any industry or parties, except that pioneers preference winners should be awarded licenses.

D. The Commission should award PCS Licenses for the 20 largest areas by paper comparative hearings.

PerTel believes that the licenses for the 20 regions with the largest populations should be awarded by paper comparative hearings. The winner would have a choice of the two available frequency blocks (assuming no pioneer's preference has been awarded for the market). The runner-up would be awarded the other available block of frequencies.

The Commission's concern about comparative hearings has been (1) the cost, (2) the time, (3) and the difficulty in deciding among different applicants. We respectfully submit that these reasons are not justification enough to eliminate the concept entirely from the award of PCS licenses. In terms of social cost, there is no indication that the total expenditure in connection with comparative hearings is greater than the total expenditure in connection with lotteries -- given the charges imposed by "application mills" and the vast

number of lottery applications that would be expected for potentially valuable PCS licenses. Indeed, we believe that streamlined comparative proceedings can be accomplished for a lower overall cost. Nor need the administrative cost to the FCC be a serious concern. We support the use of outside experts (such as the major national accounting firms) to analyze the applications and make recommendations to the Commission. Application fees would be sufficiently high to cover the expense of hiring these experts.

We believe that a streamlined, paper process could also be accomplished in a short timeframe with minimal drain on Commission resources. We propose a streamlined, comparative process as follows. Applications would be filed setting forth all relevant engineering, ownership, financial, and other information, and would contain each applicant's direct case, supported by affidavits of persons with personal knowledge. Each direct case would be required to include documentation of all ownership in the licensee (including agreements for future ownership changes), pledges, options, and financing arrangements. The only additional filings permitted would be petitions to deny, responses, and replies. We would support stringent page limitations for these filings as follows: Petitions to deny, 30 pages; Responses, 20 pages; Replies, 15 pages. No oral testimony would be taken. Where questions were raised that were not adequately answered, the Commission could

either deny the application, or give the applicant comparative demerits on the issues. The outside experts would review the applications and filings related to petitions to deny, make analyses, and give tentative rankings within a period of six months from the application dates. Three months after that -- a total of nine months after the applications were first filed -- the Commission would make its final selections.

Settlements among applicants would be permitted within four months of the date the applications were filed. Parties dismissing their applications would not be permitted to receive cash consideration above their reasonable out-of-pocket expenses. Mergers among applicants would be permitted, but no upgrading or combining of applications for comparative consideration would be allowed.

Although we would expect that making the final selections would in some cases be difficult, we do not believe this difficulty is justification for the Commission to shirk its public interest responsibilities and throw open the largest markets to speculators and gamblers. Lotteries, which reward only luck, create no positive incentives. Use of comparative paper hearings, on the other hand, will limit the pool of potential licensees to those most likely to construct and operate viable personal communications systems. And however imperfect the final selection, the licensee is much more likely to be able to initiate prompt and quality service than a lottery winner.

- E. The Commission should adopt comparative criteria that will reward technical superiority, system viability, and participation in the development of the service.
-

The Commission should set some initial guidelines for consideration of the applications for the top 20 PCS markets. The overall objective of the comparative consideration should be to award licenses to those entities who are the most likely to develop strong and competitive personal communications services in the market, and to create the proper incentives for the development of PCS and other future services.

PerTel believes that one of the primary goals of any FCC rule for PCS should be to create the proper incentives for the development of robust competition and quality service. Those incentives can be created through a streamlined, paper comparative hearing procedure. By structuring the comparative criteria properly, the Commission can (1) encourage continued experiments, market tests, and other efforts on the part of PCS proponents who have not been awarded tentative pioneer's preferences; (2) encourage consortiums of parties with market and PCS experience, technical knowledge, and financial resources to submit applications; and (3) encourage thoughtful, and reasonable proposals for the development of full-fledged, expeditious PCS services in the top markets. It is these bellweather markets where PCS will first be developed, and it is here that it is most important that the business be successful.

We suggest the Commission adopt a system with points awarded for the following:

- Specificity of the proposal. The more specific the proposal, the more points that would be awarded under this criterion. Proposals that do not contain enough specificity for a full analysis would be denied.
- Technical Merit. Points would be awarded for superior technical proposals, including the number of users, the capacity of the system for innovative types of services and the efficiency of the system's use of spectrum. The proven ability of the technology to permit spectrum to be shared with microwave licensees would be an important consideration. Points would not be awarded for proposals that rely on unproven technology.
- Build-out schedule. The applicants would receive points for proposing more rapid build-out of the service area.
- Viability of the proposal. But the build-out would have to be shown to be economically and technically viable. Questions regarding the viability of the proposal would result in loss of points overall. The application with the most rapid but realistic build-out schedule would receive maximum points under these two criteria.
- Knowledge of the market. Applicants would be rewarded for developing the best specific knowledge about the service area, from a prior presence in the market, studies and analyses, or both.
- Experience with the technology. Those applicants that could demonstrate their prior experience with the technology to be employed would receive points. Applicants that have been engaged in experiments with the technology and market acceptance should receive credit.

- Diversity in the market. Balanced against experience in a particular market may be the value of competition and diversified ownership. Cellular providers in a market, who may be eligible as described above with service to less than 20 percent of the PCS region, may suffer a loss of points under this criterion.
- Furtherance of the technology. There should be credit given to those parties that, in any market, have helped to develop the underlying technology. This is a mechanism to reward and encourage parties who have worked under experimental licenses to develop PCS, but whose efforts, for whatever reason, may not have risen to the level warranting a pioneer's preference. PerTel fully supports the concept behind pioneer's preferences, but believes there should be a further mechanism to reward parties who have contributed in substantial ways to developing new services.

F. The Commission May Use Lotteries with Strict Eligibility Requirements for the Lesser 29 Markets.

Although PerTel would support the concept of paper hearings for all PCS markets, we would not oppose the use of lotteries for the smaller 29 markets. The use of lotteries and comparative hearings could then be compared, and the risk of over-taxing the expert analysts and ultimately the full Commission would be reduced. All lottery applications would be required to contain a technically and financially viable plan for construction of some specified percent of the service area within the first two years. The plan would have to (1) contain a specific technical proposal showing how sharing with OFS

licensees would be accomplished, (2) specific financial documentation showing the availability of funding, and (3) a specific construction plan showing how service to some specified percent of the region would be accomplished within the first two years. The analysis of an applicant's technical and financial proposal, again to be made by outside consultants -- would be part of the lottery winner's establishment of its basic qualifications. If those qualifications were not adequately established, the market would be subject to a new lottery.

For both comparative hearing and lottery markets, we would support substantial application fees designed to cover all expenses of the licensing process, including the analyses by outside experts. The comparative winner, or successful lottery applicant, would not be permitted to transfer a majority of its equity ownership prior to the construction and commencement of service to some specified percentage of the population in the service area.

The proposals of both lottery and comparative winners would be tested at renewal time. We suggest an initial 5-year license, with 10-year renewal periods. Failure by the applicant to substantially deliver on its proposal by the end of the 5-year license period would warrant denial of the application for renewal. Licensees that failed to meet other interim benchmarks -- such as the 2-year construction of a

specified percent of the service area for lottery winners -- would be subject to revocation.

III. Unlicensed Operation

A. The Commission Should Permit Unlicensed PCS Operations on 20 MHz of spectrum After Appropriate Protections are Established.

PerTel does not oppose the Commission's proposal to award 20 MHz of spectrum to extremely low power PCS operations. It is essential, however, that such spectrum not be awarded until either that portion of the spectrum is cleared of OFS users or standards are established for full protection of OFS users.

IV. Regulatory Issues

PerTel believes that the regulation of PCS operations should be limited. Competition between PCS and cellular operations, as well as between PCS operators, should be intense. We believe, therefore, that PCS operators should be permitted to choose whether to offer service as a common carrier or a private carrier. We do believe, however, that local exchange companies should be required to provide physical interconnection with the PCS operator.

V. Conclusion

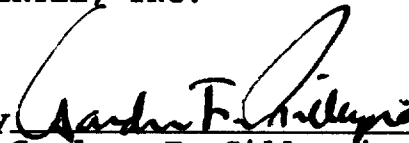
The FCC has an opportunity in this proceeding to set procedures that will result in the award of licenses for PCS to

financially and technically qualified entities, committed to the early and successful introduction of innovative and competitive services. PerTel respectfully suggests that the goal of the Commission should be to see that vigorous competition between mobile communications providers becomes a reality, not simply that the burdens on the Commission be minimized. As set forth in these Comments, the Commission can both exercise its public interest responsibilities and help to ensure that the best applicants are selected for licenses. By awarding sufficient spectrum and ensuring that viable sharing technology is employed, the Commission can also create healthy new competitors to cellular operators, without unfairly jeopardizing the interests of OFS users.

Respectfully submitted,

PERTEL, INC.

By


Gardner F. Gillespie

HOGAN & HARTSON
555 13th Street N.W.
Washington, D. C. 20004

Its Attorneys

November 9, 1992

99326